TRIM® E709

Long-life Emulsion

TRIM™ E709 is high-quality, universal soluble oil which requires minimal maintenance in even the most demanding fluid management systems. It has broad application in machining and grinding on a wide range of materials. The high levels of both chemical and mechanical lubricity in this product handle the tough machining and grinding jobs. The stable and predictable performance of E709 makes it a first choice for high-quality, consistent parts manufacturing.

Aerospace Manufacturer Reduced Foam and Extended Tool Life with TRIM™ E709



Established in 2018, the company is a leading manufacturer of rapid prototyping and high-volume CNC production of precision parts and assembly, providing a one-stop-shop from prototype to production.

Choose E709:

- Very stable formula provides long operational life with consistent performance
- Extremely hard water tolerant
- Very wide application range, suitable for both grinding and machining
- Fine particle size emulsion reduces carryoff and facilitates getting the fluid to the point of cut
- In high-speed turning and milling, E709 has the right balance of cooling and lubrication to provide good tool life and surface finishes
- Compatible with aluminum, steel alloys, cast iron, and yellow metals
- Protects machine and tool surfaces while also preventing sticky ways, chucks, tool holders, and fixtures
- Coolant is easily removed with water, working solution, or aqueous cleaners
- Easy recycling or disposal with conventional techniques and equipment
- Does not contain or test positive for phenol
- Will run effectively for long periods without the need for costly additives

E709 especially for:

Applications — boring, centerless grinding, deep hole drilling, drilling, high-speed milling, high-speed turning, machining, milling, reaming, sawing, tapping, and turning

Metals — aluminum alloys, brass, bronze, cast aluminum, exotic alloys, ferrous metals, nickel alloys, stainless steels, steels, and titanium

Industries — aerospace, automotive, energy, general fabrication, and medical

E709 is free of — NPEs and sulfur

Master Fluid SOLUTIONS®

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Application Guidelines

- Works very well in general machining where traditional soluble oil may not cool sufficiently.
- In mixed metal situations, keep concentration above 7.5% to minimize galvanic corrosion.
- If foam appears, diagnose the cause of foaming before adding antifoam — E709 does not foam easily. I.e. foam can be caused by mechanical reasons.
- Running at or above 7.5% offers the best sump life and corrosion inhibition.
- For additional product application information, including performance optimization, please contact your Master Fluid Solutions' Authorized Distributor at https://www.masterfluids.com/in/en-in/distributors/index.php, your District Sales Manager, or email us at india-info@masterfluids.com.

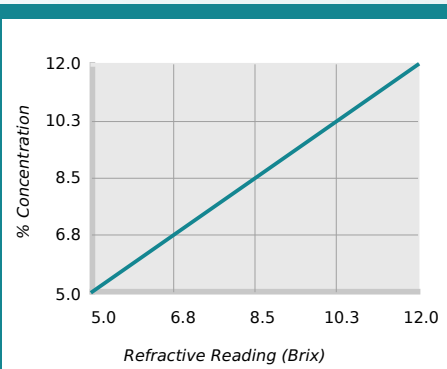
Physical Properties Typical Data

Color (Concentrate)	
Color (Working Solution)	Blue
Odor (Concentrate)	Mild, pleasant
Form (Concentrate)	Liquid
Flash Point (Concentrate) (ASTM D92-90)	> 100°C
pH (Concentrate as Range)	9.5 - 9.9
pH (Typical Operating as Range)	8.5 - 9.5
Coolant Refractometer Factor	1.0

Recommended Metalworking Concentrations

Light Duty	5.0% - 7.0%
Moderate Duty	7.0% - 9.0%
Heavy Duty	9.0% - 12.0%
Design Concentration Range	5.0% - 12.0%

Concentration by % Brix



% Concentration = Refractive Reading x Refractive Factor
Coolant Refractometer Factor % Brix = 1.0

Health and Safety

Request SDS

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Mixing Instructions

- Recommended usage concentration in water: 5.0% - 12.0%.
- To help ensure the best possible working solution, add the required amount of concentrate to the required amount of water (never the reverse) and stir until uniformly mixed.
- Use premixed coolant as makeup to improve coolant performance and reduce coolant purchases. The makeup you select should balance the water evaporation rate with the coolant carryout rate. Use our Coolant Makeup Calculator to find the best ratio for your machine: apps.masterfluids.com/makeup/.
- Use mineral-free water to improve sump life and corrosion inhibition while reducing carryoff and concentrate usage.

Ordering Information

20-litre pail

204-liter drum

1000-litre IBC

Additional Information

- Use Master STAGES™ Whamex™ for a quick and thorough precleaning of your machine tool and coolant system.
- Consult Master Fluid Solutions before using on any metals or applications not specifically recommended.
- This product should not be mixed with other metalworking fluids or metalworking fluid additives, except as recommended by Master Fluid Solutions, as this may reduce overall performance, result in adverse health effects, or damage the machine tool and parts. If contamination occurs, please contact Master Fluid Solutions for recommended action.
- TRIM™ is a trademark of Master Chemical Corporation d/b/a Master Fluid Solutions.
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- The information herein is given in good faith and believed current as of the date of publication and should apply to the current formula version. Because conditions of use are beyond our control, no guarantee, representation, or warranty expressed or implied is made. Consult Master Fluid Solutions for further information. For the most recent version of this document, please go to this URL:

https://2trim.us/di/?i=in_en-in_E709

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